

Chemicals in Atmosphere Called Cancer-Producing

By Stuart Auerbach

Washington Post Staff Writer

ST. AUGUSTINE, Fla., March 22—Two leading cancer experts warned today that the earth's environment is being filled with chemicals that could cause cancers that will not show up for another 20 years.

Their warning came just eight weeks after reports of a rare form of liver cancer among long-time workers in factories making polyvinyl chloride, a plastic product used for everything from wrapping meat to tubings in hospitals to auto seat covers.

"The cancers we are seeing now had their origin 15 to 35 years ago," Drs. E. Cuyler Hammond and Irving J. Selikoff told an American Cancer Society science writers' seminar here.

"Prevention of cancer in the year 2,000 is the order of the day in 1974," they continued.

Hammond is vice president for epidemiology of the American Cancer Society; Selikoff, professor of medicine at Mount Sinai School of Medicine in New York City.

The two cancer experts said

they are worried about "the vast number of new chemical agents" that have been introduced into the environment in recent years, including chemicals used to improve the taste, freshness and appearance of food.

Scientists estimate that 10,000 new chemical compounds are introduced into the environment every year.

"There has been and continues to be no pretesting of materials for cancer and other serious diseases," the two experts said. Examination is for serviceability, saleability, utility; whether cancer will result is hardly considered, except for radioactive devices."

Hundreds of thousands of factory workers are exposed to these new chemicals. Moreover, Hammond and Selikoff said, "A useful chemical or an efficient plastic permeates a nation, or large parts of the world. There is literally no place to hide."

They declined, however, to warn consumers to stay away from products containing the plastic polyvinyl chloride.

"There is no evidence that it is a hazard," Selikoff said, although he added that polyvi-

nyl chloride may contain low levels of vinyl chloride gas, its main constituent, which scientists believe take cancer-causing

"If vinyl chloride isn't safe, like motherhood, what is safe in the environment?" said Selikoff. "Here was a plastic, assumed to be inert, being introduced into our environment around 20, 25 years ago. All of a sudden we begin to see this central part of the chemical process industry suddenly coming to life and hardly inert in terms of cancer."

He added that experts in the chemical industry say that cancer specialists should be worried about "every" component or plastic product on the marketplace.

So far, almost 1,000 chemicals have been found to produce cancers in either human or animal tests, but many more are suspected. Unfortunately, the two scientists said today, many cancer-causing agents are not found until long after workers have been exposed to them.

So far, researchers have found 12 cases of angiosarcoma, a rare cancer of the liver, among polyvinyl chlo-

ride workers in plants in Kentucky, New York, West Virginia, Texas and Great Britain. Selikoff estimated that perhaps 5 per cent of polyvinyl chloride workers will get that cancer, which cannot be cured.

"This new occupational cancer promises to be an important cause of death among vinyl workers," Hammond and Selikoff said.

In an effort to cut workers' exposure to vinyl chloride, the U.S. Labor Department's Occupational Safety and Health Administration today said it would limit the allowable exposure level in factories to 50 parts per million. (Selikoff indicated that he would prefer a zero allowable exposure level.)

Selikoff was instrumental in showing that thousands of men and women who worked with asbestos from 1930 to 1950 have died of cancers caused by that chemical.

To prevent this type of death, Selikoff and Hammond recommended that any new chemical that is to get wide distribution be tested on animals for its cancer-causing effects.

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UL will start a program for the detection of liver cancer

By DENNIS POLITE

Louisville Times Staff Writer

A medical-research program to study angiosarcoma and related liver abnormalities and devise a medical-screening program to detect the disease at earlier stages will be headed by the University of Louisville Health Sciences Center and the UL Cancer Center.

University health sciences officials made the announcement yesterday when they announced that the B. F. Goodrich Co. has given the school a \$300,000 one-year grant to conduct the program.

Goodrich officials at the afternoon press conference said the university and the company will work together on the project.

The basic goals of the program, university officials said, will be:

- To develop and implement medical examining and screening procedures.
- Establish a registry, which will be a data bank containing all information concerning liver disease and angiosarcoma.
- Conduct clinical research related to the problems of angiosarcoma and related liver diseases.

B. F. Goodrich's chemical facility here on Bell Lane uses vinyl chloride in its processes. Vinyl chloride is thought to be a cancer-inducing agent that causes angiosarcoma.

The disease is considered rare, but seven cases have been discovered among workers at the Goodrich plant here. Five of the cases were discovered after the men died. The other two men were diag-

nosed as having the cancer after recent surgery.

In a prepared news release, the company said the discovery of the angiosarcoma cases at its plants "indicates the need for broad scientific inquiry into the possible causes, detection and treatment of this disease."

Planning was mutual

The approach to the university about the program to be developed by the grant was a mutual thing, according to university officials.

The release said full use of information developed by other agencies involved in the study of the cancer would be used in the program.

Earlier this week, the National In-

stitute for Occupational Safety and Health said it was recommending to the Occupational Safety and Health Administration that no concentration of vinyl chloride vapor be allowed in the air unless the workers wore respirators.

The first stages of the program will concentrate on the problem at Goodrich, according to Dr. Charles Kupchella, administrative and scientific coordinator of the cancer center planning office.

80 to 100 will take part.

He said the number of UL faculty members involved in the various phases of the program could be between 60 and 100.

Dr. John Orzech, plant physician for Goodrich in Louisville, said the company

"realized we had a problem and have come to the university to seek their assistance."

Orzech said 4.4 per cent (or about 50 workers) of the 1,170 employees at the plant have had to be released more than once.

He said no additional cases of angiosarcoma have been found.

Asked if there is any possibility that other cases may appear, Orzech said, "Obviously there is some suspicion or we wouldn't be initiating this project. I can't say there is no possibility that no other cases will be found. I know of no other additional cases right now."

He said, "If we should find additional cases, we'll have the expertise of the university to help treat or plan the treatment."

Company officials were indefinite about what will happen after the grant expires. They said they also haven't had time to notify other chemical firms about the grant to UL for the research program.

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Vinyl Chloride Exposure Should Be Cut To Unmeasurable Levels, Officials Urge

By a WALL STREET JOURNAL Staff Reporter

WASHINGTON — Over the objections of industry, federal scientists are recommending that worker exposure to vinyl chloride be reduced to amounts too small to be measured in order to avert possible liver cancer.

Federal standards currently limit exposure to vinyl chloride to 500 parts per million in the atmosphere, and industry experts have urged that the limit be set at 50 parts per million.

However, scientists at the National Institute for Occupational Safety and Health are unable "to describe a safe exposure level," said Dr. Marcus Key, the institute's director, advised the Labor Department. Therefore, he added, "We rejected the concept of a threshold limit for vinyl chloride gas in the atmosphere."

Instead, the institute is recommending that when an employee is exposed to any measurable concentration of vinyl chloride gas, he should wear an air-supplied respirator.

In addition, the proposal calls for a control plan to reduce air-borne levels of vinyl chloride to amounts that can't be detected by certain recommended procedures, as well as an air-sampling procedure and a system of full body protective clothing for workers in regulated areas.

In a memo to the department's Occupational Safety and Health Administration, Dr. Key said nine cases of angiosarcoma, a rare type of liver cancer, have been discovered among workers exposed to vinyl chloride for periods of 12 years and longer. Some 6,500 employees at 37 plants operated by 23 U.S. manufacturers are potentially involved.

The problem came to public attention in January when a division of B. F. Goodrich Co. said four workers at its Louisville, Ky., plant, which converts vinyl chloride into polyvinyl chloride, had died from the rare liver cancer.

Dr. Key's institute, an arm of the Department of Health, Education and Welfare, makes scientific recommendations on worker exposure to hazardous substances. However, actual standards are set by the Labor Department's Occupational Safety and Health Administration, or OSHA.

The department hasn't decided whether to issue an emergency standard for vinyl chloride exposure, an OSHA spokesman said yesterday. Dr. Key is proposing "expedited" procedures to formulate a permanent standard. Under such procedures, the department might, for example, skip the usual

step of appointing an advisory committee to make recommendations. Expedited standard setting might take up to four or five months.

Any decision to avoid a more immediate emergency standard would distress labor groups. The AFL-CIO's industrial union department had sought such a standard, which would impose engineering and workplace practices to reduce vinyl chloride exposures while a permanent standard is being prepared. Without such rules, there isn't any protection for workers while the standard-making process moves forward, said Sheldon Samuels, the industrial union department's safety and health director.

"Nothing is happening in the plants" to improve protection of workers because concerns are awaiting issuance of federal standards, Mr. Samuels asserted. Some concerns have asserted they are reducing exposures and improving procedures without federal directives.

Dr. Key's recommendation covers companies that convert vinyl chloride, a colorless gas, into polyvinyl chloride, a widely used solid plastic material.

Vinyl chloride exposure should be reduced to amounts too small to measure to avert possible liver cancer in workers, federal scientists are recommending over the objections of industry.

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